Driving Forces for Integration of Pesticide and Food Safety Systems

Module Objective:

Understand the primary drivers for integration of pesticide and food safety systems

Outline

- Driving Forces Voluntary Standards

- Relevancy to USAID

- Integrating USAID and markets

- How course this course will help

Shifting Agrifood Concerns

1970s

1980s

1990s

2000

2005

Agriculture Remains Dangerous

- 21 Fatal accidents per 100,000 workers

- 50% fatalities in agriculture

- 170,000 fatalities/year

- 2-5M pesticide poisonings/year

- 40,000 fatal poisonings/year

Food Borne Disease Worsening

- 1.8M died from food borne disease in 2005

- 30% of US population suffers annually

- $35B annual costs in US alone

Food Safety Problems can be Lethal

October 6, 2007

After Extensive Beef Recall, Topps Goes Out of Business

China Executes Former Head of Food, Drug Safety

Officials Unveil Plan to Retool Regulation

By Ariana Eunjung Cha
Washington Post Foreign Service

BEIJING, July 10 — Moving to address mounting concerns about the safety of its exports, China announced Tuesday that it had executed the former head of its food and drug safety agency for accepting bribes in exchange for approving substandard medicines.

Zheng Xiaoyu, former head of China's State Food and Drug Administration, was executed yesterday for taking bribes to approve low-quality drugs.
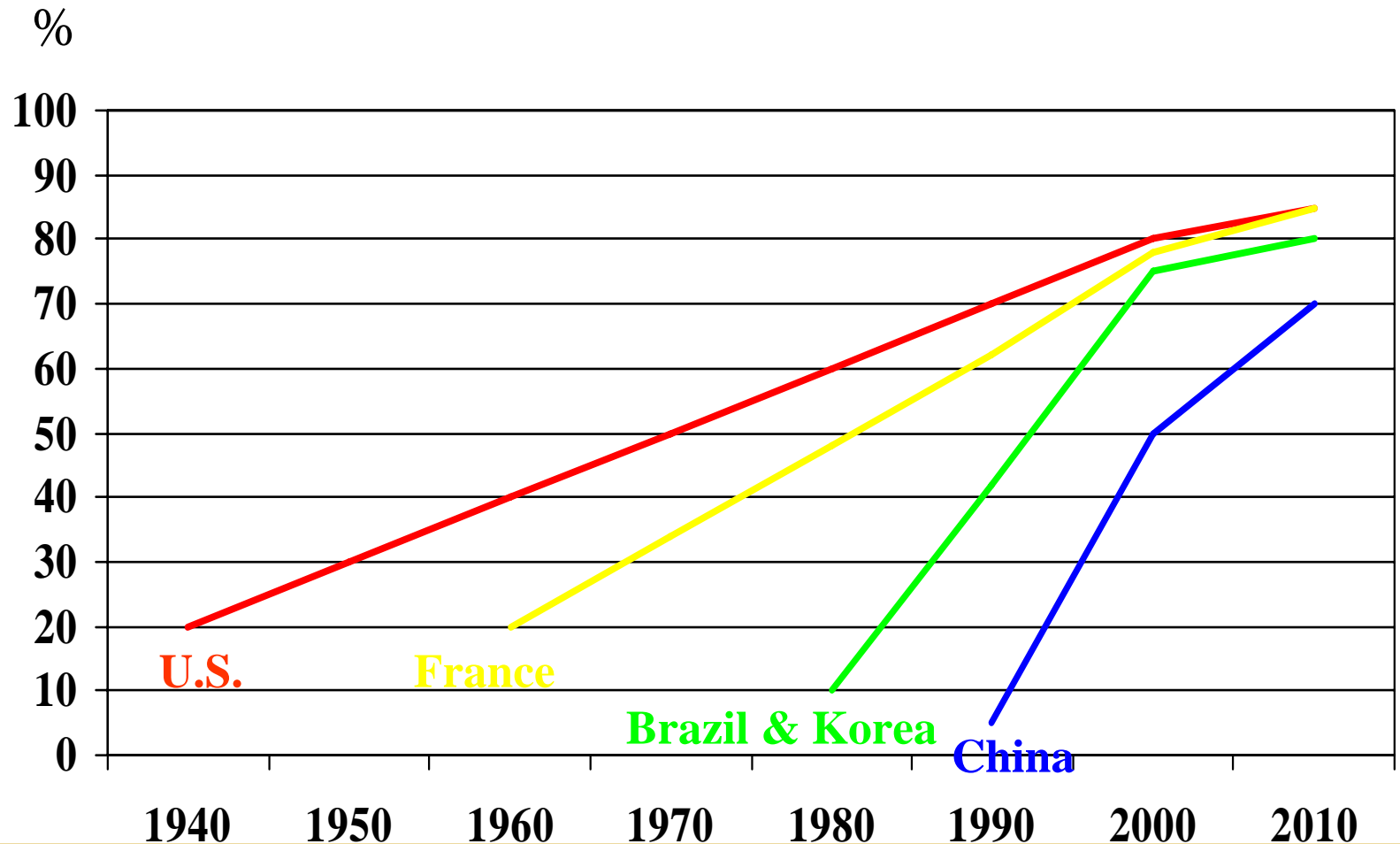
Agriculture is the Center of the Global Biodiversity Crisis

- 70% of forest loss due to agricultural conversion

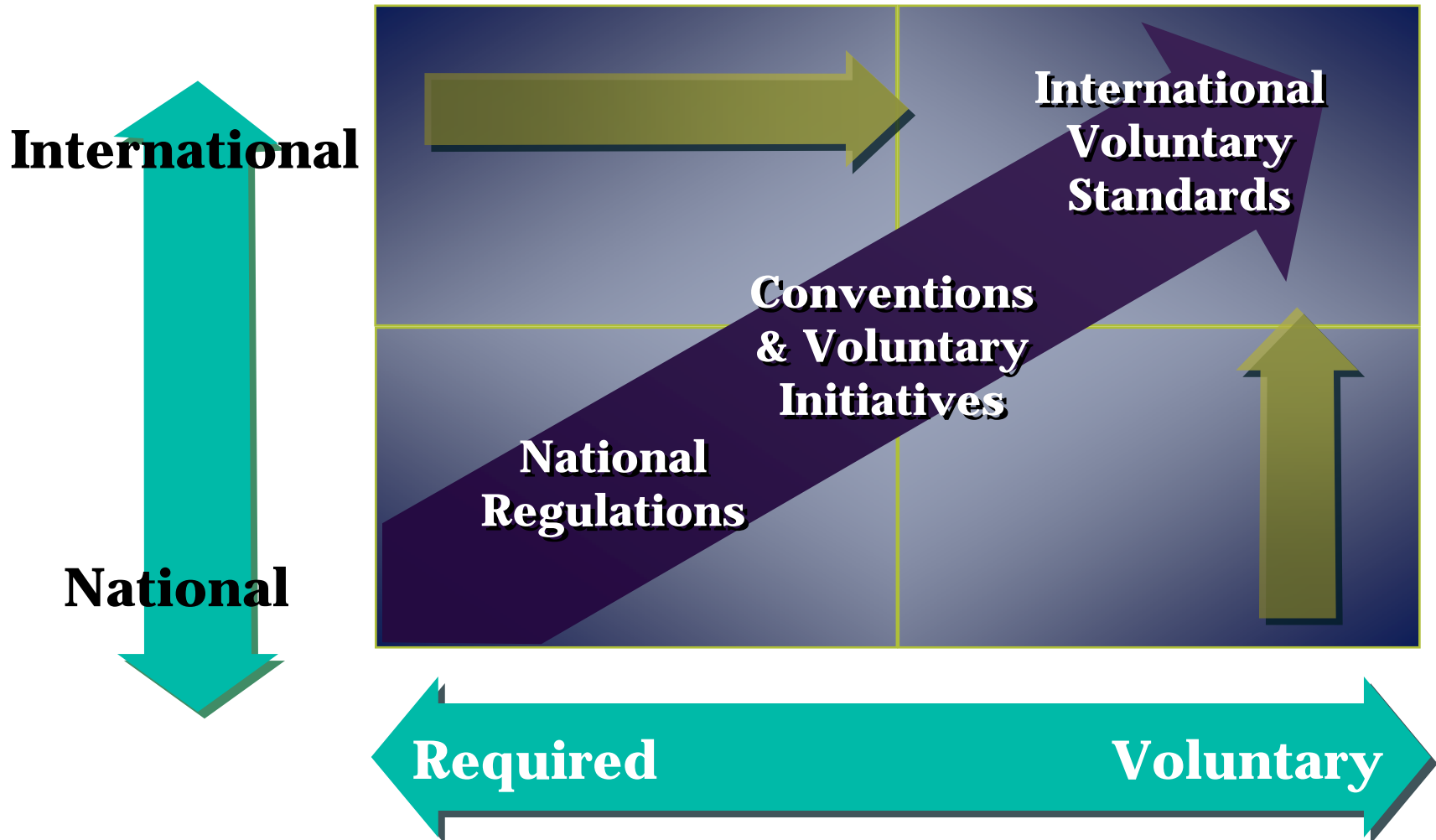- Risk losing between 30-50% remaining species

Supermarket Consolidation Drives Agrifood Interests

%

U.S. France Brazil & Korea China

1940 1950 1960 1970 1980 1990 2000 2010

Driving Forces for Integration of Pesticide
and Food Safety Systems
* Courtesy Tom Reardon, Michigan State Univ.

Trends in Food Safety Standards

International

National

International Voluntary Standards

Conventions & Voluntary Initiatives
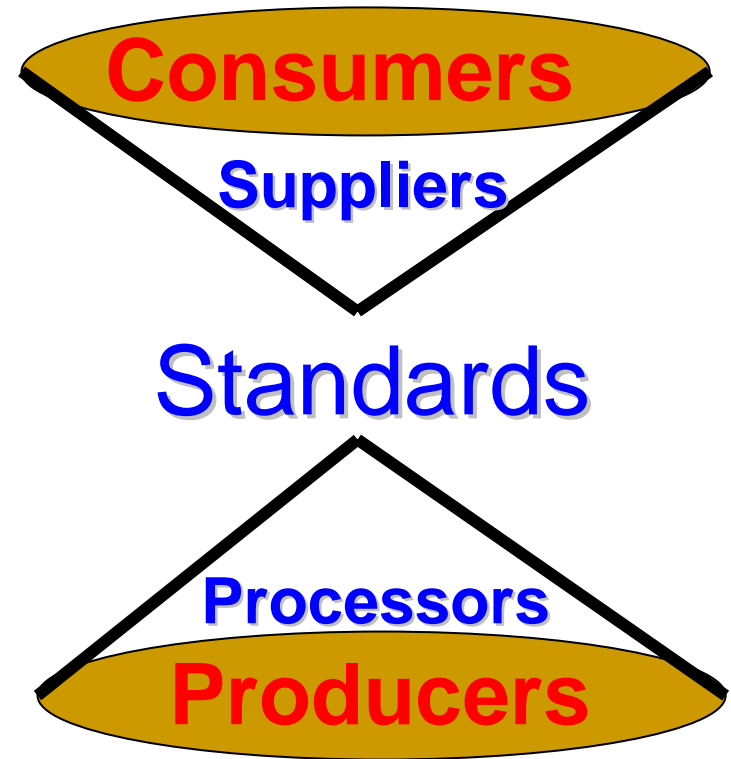
National Regulations

Required   Voluntary

Voluntary Standard Drivers

- **Public sector**
  - Reacting to food safety incidents
  - Regulatory oversight and surveillance
  - New food safety agencies
- **Consumers**
  - More informed, concerned, vocal
  - More health conscious yet obese
  - Lifestyle changes and consumer behavior
- **Markets**
  - More convenience, exotic but less seasonal
  - Dominance of supply chains by chain captains
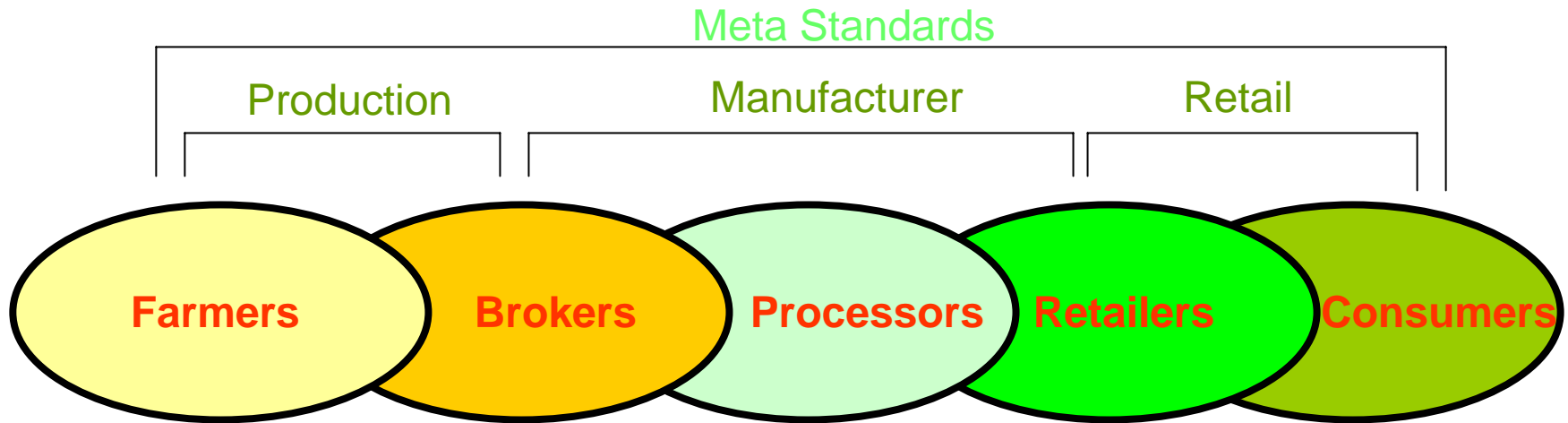 - Liability firewall between retailers & processors

Many Roles for Standards

- Ensure quality conformity

- Provide product traceability

- Product Safety & healthiness

- Cost reduction

- Capture the value of environmental goods and services

- Move "Pure Public" goods to "Market Goods" box

Risk Reduction!

Consumers

Suppliers

Standards

Processors

Producers

Many Types of Standards

Meta Standards

Production   Manufacturer   Retail

Farmers   **Brokers**   **Processors**   **Retailers**   **Consumers**

- Meta-standards – Organics, Rainforest Alliance, BMP
- Production – GlobalGAP
- Manufacturers – BRC, IFS, ISO 14001/22000
- Retail – Starbucks CAFÉ, Fair Trade,
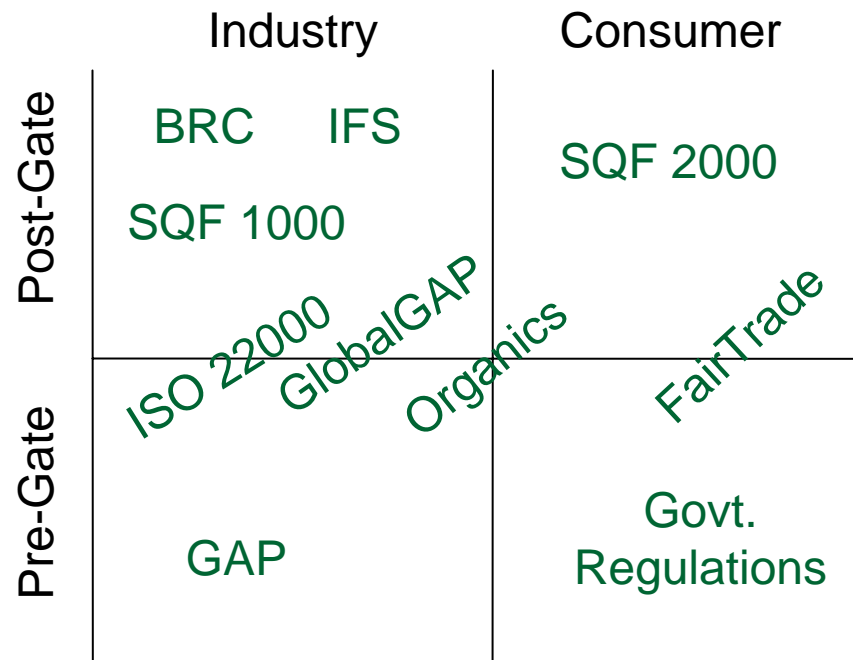
Standards apply differently

- **Post farm gate**
  - SQF 2000
  - BRC Global
- **Pre farm gate**
  - GAP
  - Govt. Regulations
- **Crossover**
  - ISO 22000
  - GlobalGAP
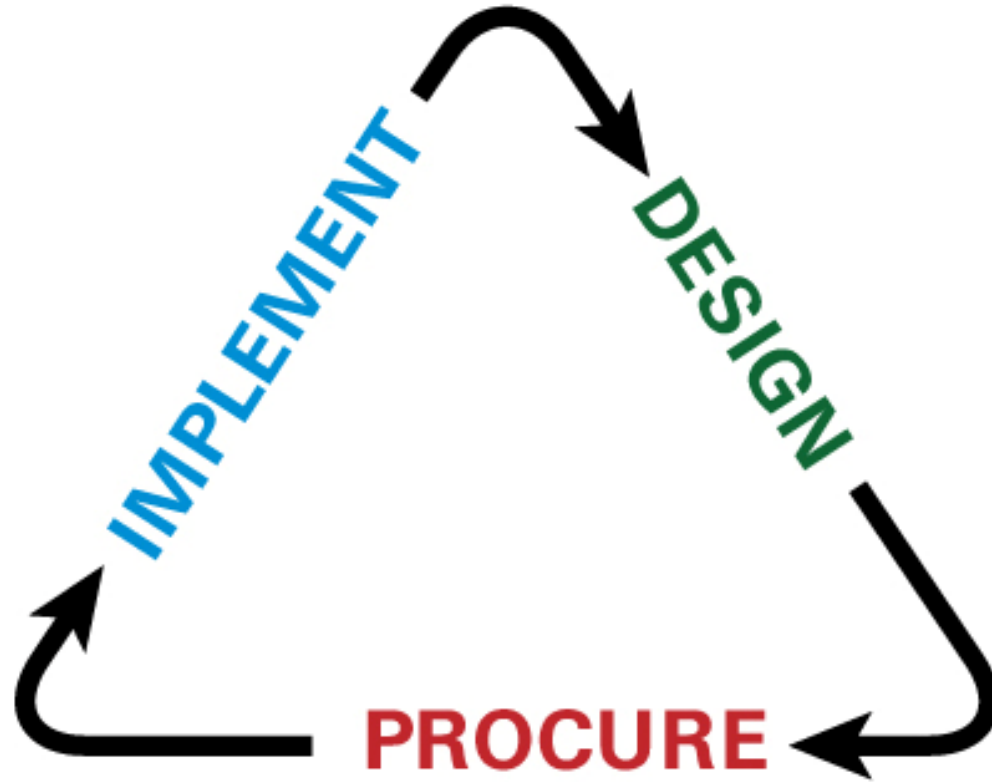
	Industry	Consumer
Post-Gate	BRC IFS SQF 1000	SQF 2000
	ISO 22000 GlobalGAP Organics	FairTrade
Pre-Gate	GAP	Govt. Regulations

USAID
FROM THE AMERICAN PEOPLE

Overview of Primary Food Safety Standards

	BRC Global Standard - Food	IFS	SQF	Dutch HACCP Code	EurepGAP	ISO 22000
Geographical range	British market (and Scandinavian market to a less extent)	essentially German and French market	American and Australian market	Dutch market	European market	international
Intended operators	food manufacturers (originally for private label products, but increasingly also for branded products)	food manufacturers (originally for private label products, but increasingly also for branded products)	SQF1000: food primary producers SQF 2000: food industries	all operators handling food (but primary producers are not explicitly mentioned)	primary producers	all operators handling food (including primary producers)
Provisions scope	quality management system + HACCP system + general good manufacturing practices	quality management system + HACCP system + general good manufacturing practices s	exclusively quality management system	quality management system +HACCP system	general good agricultural practices (including environmental issues)	quality management system +HACCP system
Requirements	the majority of UK retailers require BRC certification from all their suppliers for their private label products	the majority of French and German retailers require IFS certification from all their suppliers for their private label products	numerous American and Australian retailers recognize SQF certification, but they do not seem to require it systematically	Not available	some European retailers seem to require EurepGAP certification from all their suppliers, at least for fresh fruit and vegetables	acceptance byretailers and producers cannot yet be assessed

What does this Mean for USAID?

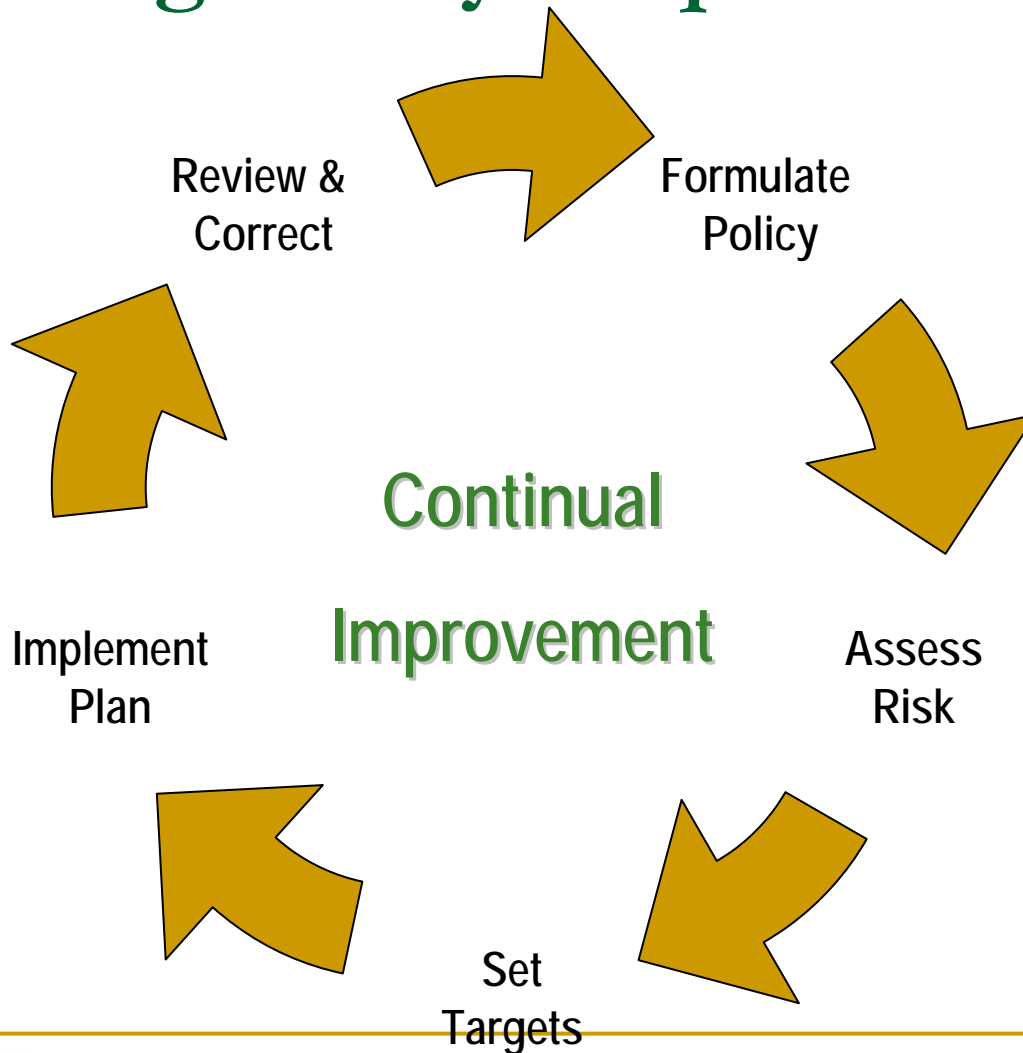**Projects are strategic and short term stakeholders**

Regulatory Requirements are the Basis for Voluntary Standards

The Relationship Between Legislation and International Food Standards

Customer Specific Codes — Tesco, Carrefour, Metro Ahold

Private Standards — BRC , IFS, Dutch HACCP EUREGAP — GFSI

ISO Standards — ISO 22000

Codex Alimentarius Standards — HACCP Principles

Legislation — EU Regulations

Common Elements of Standards Mirror Regulatory Requirements

Review & Correct

Formulate Policy

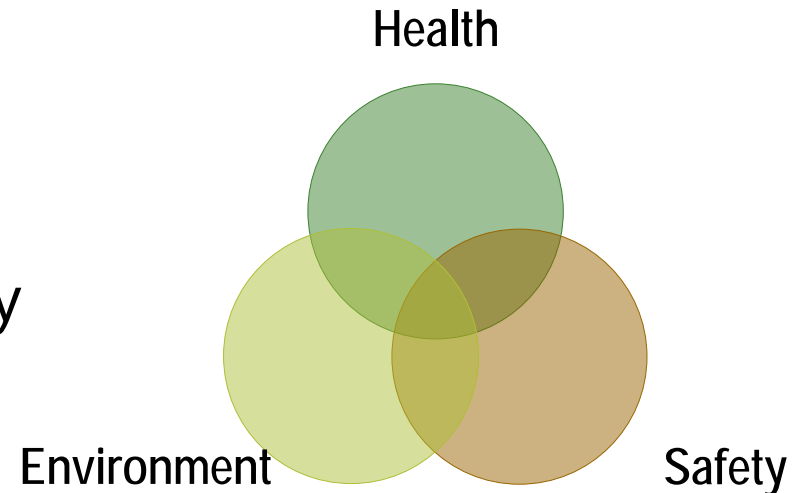Continual Improvement

Implement Plan

Assess Risk

Set Targets

Compliance through Conformance

- Achieve long term goals of safe pesticide use through strategic placement of USAID values into food safety management systems

- Leveraging market conformance motivates partners and their clients to comply with USAID and host country regulations
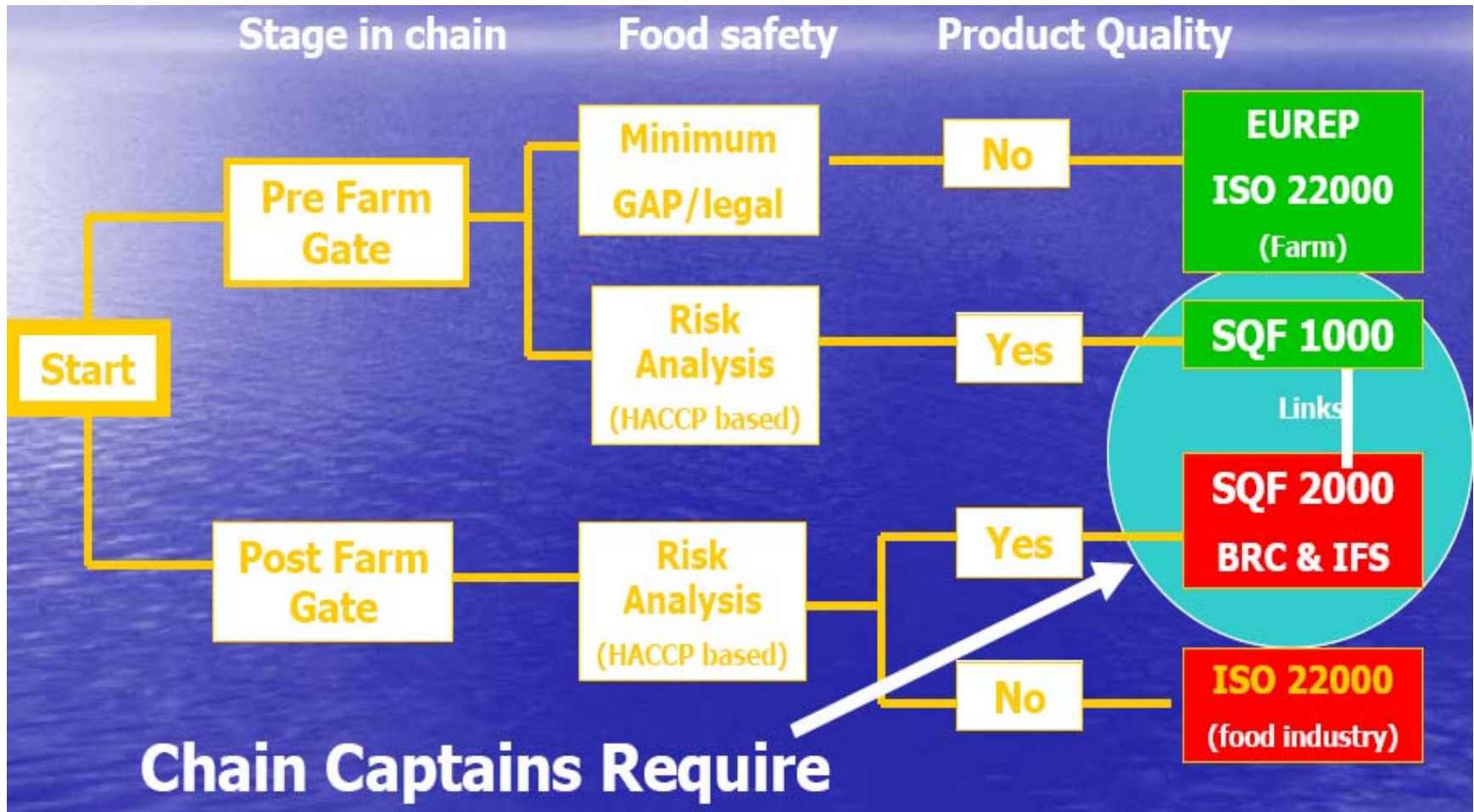
Considerations for Integration

- Policy, plan, and implement in all elements

- Integrated risk assessment

- Communications, training, documentation and emergency response

- Metrics and cost accounting structures

- Internal and external auditing requirements and providers

Health

Environment

Safety

Value Chain Requirements Differ

Chain Captains Require

Courtesy: Dr. Richard Baines,
The Royal Agricultural College, Cirencester,
Gloucestershire, UK.

Ingredients for Competing Using Standards

- Host country ability to recognize & normalize standards (equivalency)

- Installed private sector capacity to implement and audit to various standards

- Good and reliable relations with an importer, trader or wholesaler in the target market

- Access to safe, clean and efficient production technologies for agrifood processing

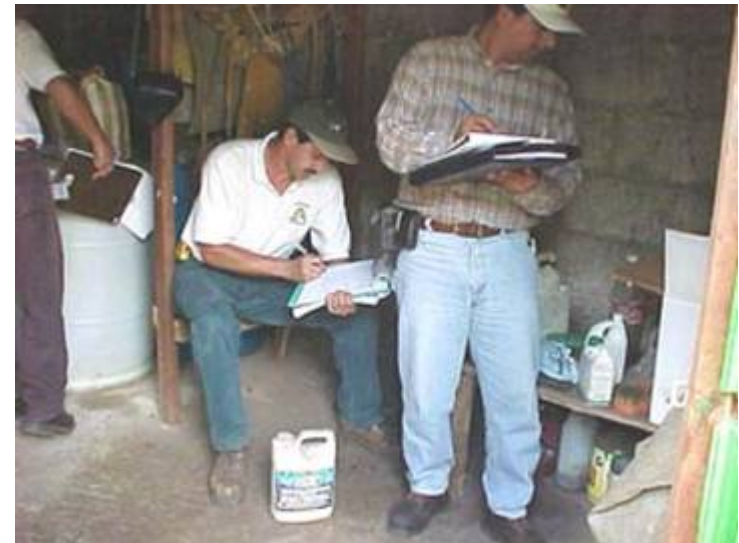# Emerging Trends | Obstacles

- Food safety concerns overshadow biodiversity

- Lack of landscape planning context and capacity

- Inadequate incentives for conformance

- Access to standards
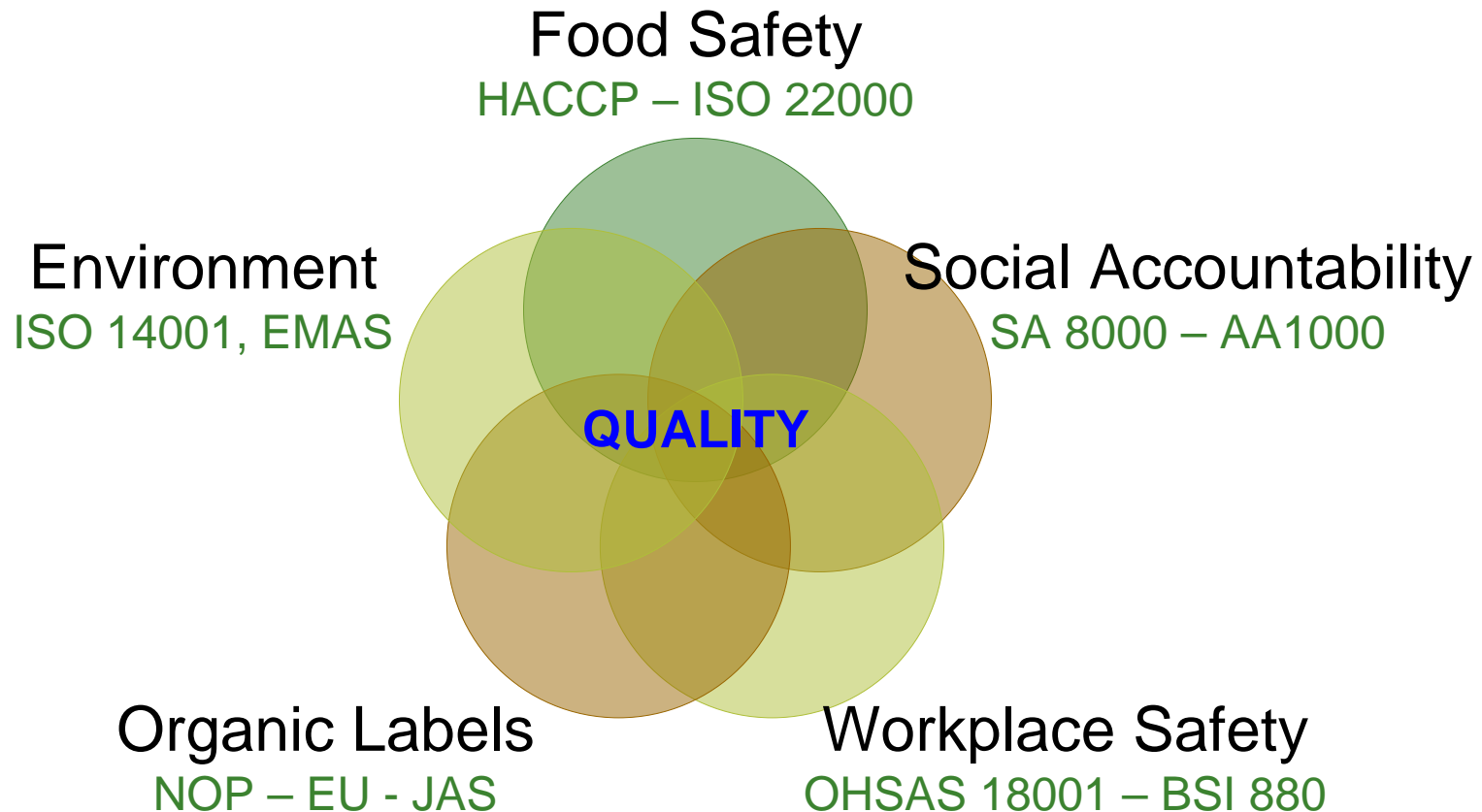
- Cost of maintaining certification

Emerging Trends | Opportunities

- Proliferation slowing
- Structural uniformity
- Planning & management-driven
- Ecosystem focus emerging
- Local capacity growing
- Consumers starting to pay
- Multinationals listening

Quality Necessary But Not Sufficient

Food Safety
HACCP – ISO 22000

Environment
ISO 14001, EMAS

Social Accountability
SA 8000 – AA1000

QUALITY

Organic Labels
NOP – EU - JAS

Workplace Safety
OHSAS 18001 – BSI 880

Recap

- Pesticides continue to be a major issue environmental issue in USAID

- Pesticides are also health and safety and food safety issue

- Globalization and agrifood consolidation forces us to integrate environmental, health, and food safety concerns

- Regulatory compliance alone does not achieve market access